

REMARKS

This amendment is in response to the non-final Office Action mailed April 13, 2011. All rejections and objections are respectfully traversed.

Applicants amend claims 1, 30, and 44 herein. Now new matter is added by these amendments.

Claims 7-8, 34-35, 48-49, and 59 are canceled herein without prejudice or disclaimer. Claims 2, 11, 37, and 51 were previously canceled.

After entry of this amendment claims 1, 3-6, 9-10, 12-33, 36, 38-47, 50, and 52-58 are pending in the application, of which claims 1, 30, and 44 are independent.

Reconsideration and further examination of the application, as amended, is hereby requested.

I. Claim Rejections under 35 U.S.C. §103(a)**A. Claims 1, 3-6, 25, 28, 56, and 59**

In the Office Action, claims 1, 3-6, 25, 28, 56, and 59 were rejected under 35 U.S.C. §103(a) because the Examiner believes the claims are unpatentable over U.S. Patent Application Publication No. 2003/0033398 to Carlson (hereafter “Carlson”) in view of U.S. Patent Application Publication No. 2003/0001896 to Johnson (hereafter “Johnson”). See Office Action, page 2. Applicants respectfully traverse the rejection.

In order to expedite prosecution, Applicants amend claims 1, 30, and 44 to incorporate subject matter similar to that formerly found in claims 7 and 8. Applicants respectfully submit that Carlson and Johnson fails to disclose at least the following features of claims 1, 3-6, 25, 28, and 56, as amended: *scanning for available hardware devices, wherein two or more of the available hardware devices each respond to different commands, and a response to a given one of the commands identifies one of the available hardware devices, and the given one of the commands is user-defined; and creating an additional hardware object for each hardware device detected and not already associated with a hardware object.*

The Examiner recognizes that Carlson and Johnson do not disclose or suggest the above-quoted features of claim 1. See Office Action, pages 13-14. Instead, the Examiner argues that U.S. Patent Application Publication No. 2003/0035008 to Fuller (hereafter “Fuller”) discloses these features. Applicants respectfully disagree.

1. Fuller does not disclose or suggest that ***a response to a given one of the commands identifies one of the available hardware devices, and the given one of the commands is user-defined***

With respect to the claim feature of *scanning for available hardware devices, wherein two or more of the available hardware devices each respond to different commands, and a response to a given one of the commands identifies one of the available hardware devices, and the given one of the commands is user-defined*, the Examiner argues that Fuller discloses this feature in paragraph [0020]. See Office Action, page 14. Specifically, the Examiner argues that Fuller allows a user to initiate a hardware scan and that a user-initiated hardware scan is “the same as sending user-defined command to a hardware device.” See Office Action, page 14.

However, allowing a user to initiate a hardware scan is not the same as allowing a user to define a command that is used to identify a hardware device. In Fuller, a user may initiate a hardware scan programmatically. See Fuller, paragraph [0020]). Further, once the hardware scan is complete, the user may craft a user-defined command to send to the hardware to cause the hardware to perform a task. See Fuller, paragraph [0021]. However, Fuller does not allow a user to construct a command that is used to identify the hardware device in the first place. In contrast, the present claims include that ***a response to a given one of the commands identifies one of the available hardware devices, and the given one of the commands is user-defined.***

Using Fuller’s system, once a device is identified, a user-defined command can be sent to the device; however, only the predefined hardware devices which can be identified by the commands preprogrammed into the system will be able to receive the user-defined commands. Thus, Fuller is limited in the number and types of hardware devices that can be identified and therefore communicated with. In contrast, because the present claims describe user-extensible commands, the presently claimed techniques may allow for more flexibility in identifying hardware devices than Fuller.

Accordingly, Johnson and Carlson, even in combination with Fuller, fail to disclose or suggest *scanning for available hardware devices, wherein two or more of the available hardware devices each respond to different commands, and response to a given one of the commands identifies one of the available hardware devices, and the given one of the commands is user-defined.*

2. Fuller does not disclose or suggest *creating an additional hardware object for each hardware device detected and not already associated with a hardware object*

Further, Fuller also fails to disclose or suggest the claim feature of *creating an additional hardware object for each hardware device detected and not already associated with a hardware object.*

The above-quoted feature was formerly found in dependent claim 7. In the analysis of claim 7, the Examiner argues that “Fuller teaches a method and apparatus for controlling an instrumentation system that automatically scans for available hardware (instruments) and allowing users to select hardware (instruments from a list of detected hardware (instruments)).” See Office Action, page 13.

However, scanning for the hardware instruments was not the only feature recited in claim 7: claim 7 also required *creating an additional hardware object for each hardware device detected and not already associated with a hardware object.* This feature is now incorporated into independent claims 1, 30, and 44. Fuller does not disclose this feature, and this feature was not considered or analyzed in the present Office Action. Accordingly, Applicants respectfully submit that a *prima facie* case of obviousness has not been established with respect to this feature.

Indeed, Fuller does not disclose or suggest this feature. The present claim describes several requirements for a *hardware object*. For example, a hardware object: *is accessible to the computer, is depicted in the graphical interface, and interacts with the hardware device.* Fuller does not create such a hardware object for each hardware device detected during the scanning process and not already associated with a hardware object. Instead, Fuller simply provides a list of accessible instruments and allows a user to select “an instrument” to send

commands to. See Fuller, paragraph [0020]. The cited passage does not create any hardware objects as that term is described in the present Specification.

Further, the present claims require creating a hardware object for *each hardware device detected and not already associated with a hardware object*. That is, the present claims describe a process where it is determined whether a hardware device is already associated with a hardware object and a new hardware object is created for those objects not yet associated with a hardware object. The cited passage of Fuller does not identify whether a hardware device is already associated with a hardware object, and creating a new hardware object for a hardware device *not already associated with a hardware object*.

In view of the above, Johnson and Carlson, even in combination with Fuller, fail to disclose or suggest each and every feature of claims 1, 3-6, 25, 28, and 56. For at least the reasons identified above, Applicants respectfully request that the above rejection of claims 1, 3-6, 25, 28, and 56 be reconsidered and withdrawn.

As claim 59 is canceled herein, Applicants respectfully submit that the above rejection of claim 59 is moot.

B. Claims 7, 8 and 12-14

In the Office Action, claims 7, 8, and 12-14 were rejected under 35 U.S.C. §103(a) because the Examiner believes that these claims are obvious under Johnson and Carlson in view of Fuller. Applicants respectfully traverse the rejection.

As claims 7 and 8 are canceled herein, Applicants respectfully submit that the rejection of claims 7 and 8 is moot.

With respect to claims 12-14, claims 12-14 depend from claim 1 and therefore include each and every feature of claim 1. As noted above, Johnson, Carlson, and Fuller, alone or in any reasonable combination, fail to disclose or suggest each and every feature of claim 1. Therefore, Fuller, Carlson, and Johnson, alone or in any reasonable combination, do not disclose or suggest each and every feature of claims 12-14. Accordingly, Applicants respectfully request that the above §103 rejection of claims 12-14 be reconsidered and withdrawn.

C. **Claims 9 and 10**

In the Office Action, claims 9 and 10 were rejected under 35 U.S.C. §103(a) because the Examiner believes that these claims are obvious under Johnson and Carlson in view of U.S. Patent Application No. 2003/0001896 to Hsiung et al. (hereafter “Hsiung”). See Office Action, page 16. Applicants respectfully traverse the rejection.

Claims 9 and 10 depend from claim 1 and, as such, include each and every feature of claim 1. As noted above, Johnson and Carlson (even in combination with Fuller) do not disclose or suggest: *scanning for available hardware devices, wherein two or more of the available hardware devices each respond to different commands, and a response to a given one of the commands identifies one of the available hardware devices, and the given one of the commands is user-defined; and creating an additional hardware object for each hardware device detected and not already associated with a hardware object.*, which is present in claim 1.

Hsiung also does not disclose or suggest these features. Hsiung discusses a technique for processing information or data over a network of computers.

Hsiung further discusses a system for monitoring and controlling a process, or both monitoring and controlling a process, [0007]. The system illustrated in Hsiung includes an input module for receiving a plurality of parameters from a process for manufacture of a substance or object. Hsiung is silent as to *scanning for available hardware devices, wherein two or more of the available hardware devices each respond to different commands, and a response to one of the commands identifies one of the available hardware devices, and the one of the commands is user-defined; and creating an additional hardware object for each hardware device detected and not already associated with a hardware object.*

Thus Hsiung, Johnson, and Carlson alone or in any reasonable combination, do not disclose or suggest each and every feature of claim 1. Therefore, Hsiung and Johnson, alone or in any reasonable combination, do not disclose or suggest each and every feature of claims 9 and 10. For at least the reasons set forth above, Applicants respectfully request that the above §103 rejection of claims 9 and 10 be reconsidered and withdrawn.

D. Claim 15

In the Office Action, claim 15 was rejected under 35 U.S.C. §103(a) because the Examiner believes that this claim is obvious under Johnson and Carlson in view of Fuller and Hsiung. See Office Action, page 17. Applicants respectfully traverse the rejection.

Claim 15 depends from claim 1 and, as such, includes each and every feature of claim 1. As discussed above in I.A-I.C, Johnson, Carlson, Fuller, and Hsiung does not disclose or suggest *scanning for available hardware devices, wherein two or more of the available hardware devices each respond to different commands, and a response to a given one of the commands identifies one of the available hardware devices, and the given one of the commands is user-defined; and creating an additional hardware object for each hardware device detected and not already associated with a hardware object.*, which is present in claim 1.

Thus Fuller, Hsiung, Johnson, and Carlson, alone or in any reasonable combination, do not disclose or suggest each and every feature of claim 1. Therefore, Fuller, Hsiung and Johnson, alone or in any reasonable combination, do not disclose or suggest each and every feature of claim 15. Accordingly, Applicants respectfully request that the above §103 rejection of claim 15 be reconsidered and withdrawn.

E. Claims 16-17 and 27

In the Office Action, claims 16-17 and 27 were rejected under 35 U.S.C. §103(a) because the Examiner believes that these claims are obvious under Johnson and Carlson in view of U.S. Patent Application No. 2003/0004670 to Schmit et al. (hereafter “Schmit”). See Office Action, page 17. Applicants respectfully traverse the rejection.

Claims 16, 17 and 27 depend from claim 1 and, as such, include each and every feature of claim 1. Johnson and Carlson (even in combination with Fuller) do not disclose or suggest *scanning for available hardware devices, wherein two or more of the available hardware devices each respond to different commands, and a response to a given one of the commands identifies one of the available hardware devices, and the given one of the commands is user-*

defined; and creating an additional hardware object for each hardware device detected and not already associated with a hardware object, which is present in claim 1.

Schmit discusses one or more measurement devices comprising a measurement hardware device, a virtual measurement device or other type of device. (Schmit at [0013]). Schmit further indicates that a graphical user interface presents a list of available devices and corresponding channels appropriate for the indicated measurement type, where each of the channels corresponds to a terminal of a corresponding device. (Schmit at [0016]). Schmit further indicates that if the selected measurement type were voltage, the devices listed may be those devices available to the system which are suitable for measuring a voltage. (Schmit at [0136]). However, Schmit is silent with respect to *scanning for available hardware devices, wherein two or more of the available hardware devices each respond to different commands, and a response to a given one of the commands identifies one of the available hardware devices, and the given one of the commands is user-defined; and creating an additional hardware object for each hardware device detected and not already associated with a hardware object*.

Thus Schmit, Johnson, and Carlson, alone or in any reasonable combination (even in combination with Fuller), do not disclose or suggest each and every feature of claim 1. Therefore, Schmit and Johnson, alone or in any reasonable combination, do not disclose or suggest each and every feature of claims 16, 17 and 27. Accordingly, Applicants respectfully request that the above §103 rejection of claims 16-17 and 27 be reconsidered and withdrawn.

F. Claims 18-24 and 26

In the Office Action, claims 18-24 and 26 were rejected under 35 U.S.C. §103(a) as being obvious under Johnson and Carlson in view of Hsiung, and U.S. Patent Application No. 2003/0056018 to Pike et al. (hereafter “Pike”). See Office Action, page 18. Applicants respectfully traverse the rejection.

Claims 18-24 and 26 depend from claim 1 and, as such, include each and every feature of claim 1. As noted above, Johnson, Carlson, and Hsiung (even in combination with Fuller) do not disclose or suggest *scanning for available hardware devices, wherein two or more of the available hardware devices each respond to different commands, and a response to a given*

one of the commands identifies one of the available hardware devices, and the given one of the commands is user-defined; and creating an additional hardware object for each hardware device detected and not already associated with a hardware object., which are present in claim 1.

Pike also does not disclose or suggest this feature. Pike discusses receiving a first creation command from a user interface and establishing a communication channel linking the command interpreter and the control instrument independent of the interface bus or interface hardware driver type. (Pike at [0004]). Pike indicates a GUI that displays information regarding the configuration of the various communication channels the user may establish in response to user commands. (Pike at [0036]). However, Pike is silent with respect to *scanning for available hardware devices, wherein two or more of the available hardware devices each respond to different commands, and a response to a given one of the commands identifies one of the available hardware devices, and the given one of the commands is user-defined; and creating an additional hardware object for each hardware device detected and not already associated with a hardware object.*

Thus Pike, Hsiung, Johnson, and Carlson, alone or in any reasonable combination, do not disclose or suggest each and every feature of claim 1. Therefore, Pike, Hsiung and Johnson, alone or in any reasonable combination, do not disclose or suggest each and every feature of claims 18-24 and 26. For at least the reasons set forth above, Applicants respectfully request that the above §103 rejection of claims 18-24 and 26 be reconsidered and withdrawn.

G. Claim 29

In the Office Action, claim 29 was rejected under 35 U.S.C. §103(a) because the Examiner believes that this claim is obvious under Johnson and Carlson in view of U.S. Patent No. 5,986,653 to Phathayakorn et al. (hereafter “Phathayakorn”). See Office Action, page 21. Applicants respectfully traverse the rejection.

Claim 29 depends from claim 1 and, as such, includes each and every feature of claim 1. As noted above, Johnson and Carlson (even in combination with Fuller) do not disclose or suggest *scanning for available hardware devices, wherein two or more of the available*

hardware devices each respond to different commands, and a response to a given one of the commands identifies one of the available hardware devices, and the given one of the commands is user-defined; and creating an additional hardware object for each hardware device detected and not already associated with a hardware object., which is present in claim 1.

Phathayakorn discusses a method for signaling and acknowledging events associated with resource object organized in a foldable object tree displayed by a GUI. Phathayakorn further indicates that a foldable object tree allows a part of the tree to be folded into its parent object, (Col. 1, lines 55-60).

Phathayakorn also does not disclose or suggest the above-quoted feature of claim 1. Phathayakorn describes displaying data relating to signaling and acknowledging events associated with a resource object. (Phathayakorn at col. 1 lns. 55-60). Phathayakorn is not concerned with *scanning for available hardware devices, wherein two or more of the available hardware devices each respond to different commands, and a response to a given one of the commands identifies one of the available hardware devices, and the given one of the commands is user-defined; and creating an additional hardware object for each hardware device detected and not already associated with a hardware object.*

Thus Phathayakorn, Johnson, and Carlson, alone or in any reasonable combination (even in combination with Fuller), do not disclose or suggest each and every feature of claim 1. Therefore, Fuller, Hsiung and Phathayakorn in any reasonable combination, do not disclose or suggest each and every feature of claim 29. For at least the reasons set forth above, Applicants respectfully request that the above §103 rejection of claim 29 be reconsidered and withdrawn.

H. Claims 30-33, 36, 42-47, 50, and 57-58

In the Office Action, claims 30-33, 36, 42-47, 50, and 57-58 were rejected under 35 U.S.C. §103(a) because the Examiner believes that these claims are obvious over Johnson and Carlson in view of U.S. Patent No. 6,185,491 to Gray (hereafter “Gray”). See Office Action, page 22. Applicants respectfully traverse the rejection.

Independent claims 30 and 44 each recite, among other things, *scanning for available hardware devices, wherein two or more of the available hardware devices each respond to*

different commands, and a response to a given one of the commands identifies one of the available hardware devices, and the given one of the commands is user-defined; and creating an additional hardware object for each hardware device detected and not already associated with a hardware object.

Applicants respectfully submit that Johnson, Carlson, and Gray, alone or in any reasonable combination, do not disclose or suggest at least these features of claims 30 and 44.

As noted above with respect to claim 1, Johnson and Carlson (even in combination with Fuller) do not disclose or suggest these features of claims 30 and 44. The addition of Gray fails to cure the factual deficiencies of Johnson and Carlson with respect to these features.

Gray is generally directed to a vehicle control computer system. See Gray, Abstract. While Gray discusses a device interface for a hardware device, Gray does not allow for user-defined commands used to identify the hardware device. Indeed, Gray is silent with respect to the above-quoted features of claims 30 and 44.

For at least the reasons stated above, Johnson, Carlson, and Gray, alone or in any reasonable combination (even in combination with Fuller), do not disclose or suggest each and every feature of claims 30 and 44. Claims 31-33, 36, 42-43, 45-47, 50, and 57-58 depend from independent claims 30 and 44, respectively, and as such incorporate all of the features of claims 30 and 44. Accordingly claims 31-33, 36, 42-43, 45-47, 50, and 57-58 are allowable for at least the reasons set forth above with respect to claim 30.

Applicants respectfully request the Examiner to reconsider and withdraw the above rejection of claims 30-33, 36, 42-47, 50, and 57-58 under 35 U.S.C. § 103(a).

I. Claims 34, 35, 38, 48, 49, and 52

Claims 34, 35, and 38 were rejected under 35 U.S.C. §103(a) as being obvious over Johnson, Carlson, Gray, and Fuller. See Office Action, page 32. Applicants respectfully traverse the rejection.

As claims 34-35 and 48-49 are canceled herein, Applicants respectfully submit that the rejection of these claims is moot.

Claim 38 depends from claim 30 and claim 52 depends from claim 44. As such, claims 38 and 52 include each and every feature of claims 30 and 44, respectively. As previously discussed, Johnson, Carlson, Gray, and Fuller, alone or in any reasonable combination, do not disclose or suggest *scanning for available hardware devices, wherein two or more of the available hardware devices each respond to different commands, and a response to a given one of the commands identifies one of the available hardware devices, and the given one of the commands is user-defined*; and *creating an additional hardware object for each hardware device detected and not already associated with a hardware object*, which are present in claims 30 and 44.

For at least the reasons set forth above, Fuller Gray, and Johnson, alone or in any reasonable combination, do not disclose or suggest each and every feature of claims 38 and 52. Accordingly, Applicants respectfully request that the above §103 rejection of claims 38 and 52 be reconsidered and withdrawn.

J. Claims 39, 40, 43, 53, and 54

In the Office Action, claims 39-40, 43, 53, and 54 were rejected under 35 U.S.C. §103(a) because the Examiner believes that these claims are obvious in view of Johnson, Carlson, Gray, and Schmit. See Office Action, page 34. Applicants respectfully traverse the rejection.

Claims 39-40 and 43 depend from claim 30 and, as such, include each and every feature of claim 30. Claims 53 and 54 depend from claim 44 and, as such, include each and every feature of claim 44. Johnson, Carlson, and Gray (even in combination with Fuller) do not disclose or suggest *scanning for available hardware devices, wherein two or more of the available hardware devices each respond to different commands, and a response to a given one of the commands identifies one of the available hardware devices, and the given one of the commands is user-defined*; and *creating an additional hardware object for each hardware device detected and not already associated with a hardware object*., which are present in claims 30 and 44.

Schmit also does not disclose or suggest these features. Indeed, as noted above with respect to claim 16, Schmit is silent with respect to these features of claims 30 and 44.

Thus Schmit, Gray, Johnson, and Carlson, alone or in any reasonable combination, do not disclose or suggest or suggest each and every feature of claims 39-40, 43, and 53-54. For at least the reasons set forth above, Applicants respectfully request that the above §103 rejections of claims 39-40, 43, and 53-54 be reconsidered and withdrawn.

K. Claims 41, 42, and 55

In the Office Action, claims 41-42, and 55 were rejected under 35 U.S.C. §103(a) because the Examiner believes that these claims are obvious over Johnson, Carlson, Gray, and Pike. See Office Action, page 35. Applicants respectfully traverse the rejection.

Claims 41 and 42 depend from claim 30 and, as such, include each and every feature of claim 30. Claim 55 depends from claim 44 and, as such, includes each and every feature of claim 44. Johnson, Carlson, and Gray, alone or in any reasonable combination (even in combination with Fuller), do not disclose or suggest *scanning for available hardware devices, wherein two or more of the available hardware devices each respond to different commands, and a response to a given one of the commands identifies one of the available hardware devices, and the given one of the commands is user-defined; and creating an additional hardware object for each hardware device detected and not already associated with a hardware object.*, which are present in claims 30 and 44.

Pike also does not disclose or suggest these features. Pike describes communicating with a device in order to configure it. (Pike at [0027]). Pike describes that the user enters configuration data and then communicates back and forth with the device in order to change the configuration of the device itself. Pike does not describe *scanning for available hardware devices, wherein two or more of the available hardware devices each respond to different commands, and a response to a given one of the commands identifies one of the available hardware devices, and the given one of the commands is user-defined; and creating an additional hardware object for each hardware device detected and not already associated with a hardware object.*

Thus Pike, Gray, Carlson, and Johnson, alone or in any reasonable combination (even in combination with Fuller), do not disclose or suggest each and every feature of claims 41, 42, and

55. For at least the reasons set forth above, Applicants respectfully request that the above §103 rejection of claims 41, 42, and 55 be reconsidered and withdrawn.

CONCLUSION

In view of the foregoing claim amendments and remarks, Applicants believe that all claims should be passed to allowance. Should the Examiner feel that a teleconference would expedite the prosecution of this application, the Examiner is urged to contact the Applicants' attorney at (617) 202-4616.

As Applicants' remarks with respect to the Examiner's rejections and/or objections overcome the rejections and/or objections, Applicants' silence as to certain assertions by the Examiner in the Office Action or certain requirements that may be applicable to such rejections and/or objections (e.g., whether a reference constitutes prior art, reasons to modify a reference and/or combine references, assertions as to dependent claims) is not a concession by Applicants that such assertions are accurate or that such requirements have been met, and Applicants reserve the right to dispute these assertions/requirements in the future.

Please charge any shortage or credit any overpayment of fees to our Deposit Account No. 12-0080, under Order No. MWS-104RCE3. In the event that a petition for an extension of time is required to be submitted herewith, and the requisite petition does not accompany this response, the undersigned hereby petitions under 37 C.F.R. § 1.136(a) for an extension of time for as many months as are required to render this submission timely. Any fee due is authorized to be charged to the aforementioned Deposit Account.

Dated: July 13, 2011

Respectfully submitted,

Electronic signature: /Matthew T. Fagan /
Matthew T. Fagan
Registration No.: 67,323
Nelson Mullins Riley and Scarborough, LLP
One Post Office Square
Boston, Massachusetts 02109-2127
(800) 237-2000
(617) 573-4710 (Fax)
Attorney/Agent For Applicant

-